

panel. More particularly, the '550 system determines view angle dependent defects by capturing an LCD image viewed obliquely over the entire LCD panel while in focus. This "while in focus" appears to be the crux of the '550 invention, for that is to which the two embodiments are directed.


One is a CCD camera using what is called a "tilt" lens for focussing the entire LCD panel which is inclined relative to the CCD pixel plane of the camera (see col. 3, line 45 seq.).

The other one utilizes a "shift" lens system in which the CCD plane and the LCD plane are parallel relationship. The distorted image of the LCD plane becomes the image viewed from the front by the shifting a lens mirror cylinder toward the LCD panel.

Neither of these embodiments, nor, in fact, does the disclosure as a whole, of the '550 patent teach anything even remotely similar to Applicant's method of improving the accuracy of optical 3-D measuring methods of the kind which, for generating an image, utilize at least one matrix camera with an image recording matrix with a pixel raster of known width, by measuring the individual deviation of a pixel site relative to a desired pixel site position in the raster, determining the exact individual pixel sites from the measured deviation, and taking the exact pixel sites into consideration when calculating data relating to a three-dimensional object.

It is earnestly urged that as amended, the present application is in condition for allowance which is courteously solicited.

Respectfully submitted,


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Attorney Docket # 010502 US

Application No.: 10/035,469

Version with markings to show changes made:

In the Specification:

The paragraph beginning at line 2 on page 3 has been amended as follows:

It is an object of the invention, for defining deviations from the desired position of the pixel sites of pixels of at least one image recording matrix, to make use of the method proposed in co-pending U.S. patent application No.:~~[...]~~ 10/035,491 filed on even date herewith [(Attorney Docket 010501)] wherein the image recording matrix becomes a component of an optical 3-D measuring system at least while the method is being practiced.

The Claim has been amended as follows:

A method of improving the accuracy of [optical] methods of optically measuring 3-D objects to obtain data relevant thereof of the kind which for generating an image utilize at least one matrix camera with an image recording matrix [the raster width of the] with a pixel raster of [which is] known width, [characterized by] comprising the steps of:

- a) measuring the individual deviation of the actual pixel [site] sites relative to a desired pixel site position in the pixel raster;
- b) determining from the measured deviation the individual exact pixel sites; and
- c) taking the exact pixel sites into consideration when calculating the 3-D data.

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